

201-15069

Anh Nguyen

01/27/04 07:15 AM

To: NCIC HPV@EPA

cc:

Subject: Environmental Defense comments on Phenol, 2-sec-butyl-4,6-dinitro- (CAS# 88-85-7)

----- Forwarded by Anh Nguyen/DC/USEPA/US on 01/27/2004 07:11 AM -----



rdenison@environmentaldefense.org

01/26/2004 02:49 PM

To: NCIC OPPT@EPA, ChemRTK HPV@EPA, Rtk Chem@EPA, Karen Boswell/DC/USEPA/US@EPA, mark_thomson@cromptoncorp.com

cc: MTC@mchsi.com, kflorini@environmentaldefense.org, rdenison@environmentaldefense.org

Subject: Environmental Defense comments on Phenol, 2-sec-butyl-4,6-dinitro- (CAS# 88-85-7)

(Submitted via Internet 1/26/04 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, and mark_thomson@cromptoncorp.com)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for Phenol, 2-sec-butyl-4,6-dinitro- (CAS# 88-85-7).

The Crompton Corporation, in response to EPA's High Production Challenge, has submitted Robust Summaries and a Test Plan describing available data for phenol, 2-sec-butyl-4,6-dinitro-, also known as 4,6-dinitrobutylphenol, or DNBP (CAS# 88-85-7), and has proposed testing needed to fulfill the remaining requested SIDS elements. Our review of this submission indicates the Test Plan provides minimal information, whereas some portions of the Robust Summaries are overly detailed.

According to the Test Plan, DNBP is used as a polymerization inhibitor in the production of styrene and as an herbicide on "limited government approved agricultural commodities". Little other information is provided regarding its level of production, uses or potential for human and environmental exposure. Information provided in the Test Plan and Robust Summaries indicates that DNBP is quite toxic to aquatic organisms and mammals, is mutagenic in some systems, is toxic to reproduction and is non-biodegradable. This is a considerable list of adverse characteristics for a chemical that is applied directly to agricultural soils. A brief search of the literature indicates there are over 800 peer-reviewed publications describing uses and properties as well as fate and toxicity of this chemical. Thus, though it may not be strictly required under the HPV Challenge, it would seem appropriate that more information regarding the fate of this chemical in the environment should be provided the public.

The Robust Summaries are generally satisfactory except that some, particularly those describing reproductive and developmental toxicity, appear to be reproductions of the entire publications, including all the methods and tables. That level of detail seems excessive for "Robust Summaries".

Specific Comments:

1. A list of synonyms and alternative chemical names was not provided for this chemical. A list should be provided given that EPA and the sponsor's cover letter use a different chemical name than that used in the Test Plan.

RECEIVED
OPPT/CBIC
04 JAN 28 AM 10:53

2. Under biodegradation in the Test Plan and Robust Summary, this chemical is said to be "not readily biodegradable". It is then stated that "the chemical contains no biodegradable groups; therefore, no biodegradation testing is proposed". This statement provides insufficient grounds for not conducting testing, as virtually everything is biodegraded to some extent. The Robust Summary indicates computer modeling is the basis for this prediction. Given the widespread and dispersive use of DNBP, experimental data should be generated to address this SIDS element.

3. In some cases the Test Plan provides only minimal data to address specific SIDS elements, while in others, e.g. Transport and Distribution in the environment, the Test Plan states that the data have been estimated using models, but does not provide the results. These results are available in the Robust Summaries and should be presented and briefly described in the Test Plan.

4. Rather than reference information provided in the Test Plan as "reported in the literature," the actual data and the reference should be provided.

5. In a number of studies described in the Robust Summaries, the number of replicates is given as "0". One would assume, if the study was done according to any reasonable protocol, there would be at least one replication.

Thank you for this opportunity to comment.

Hazel B. Matthews, Ph.D.
Consulting Toxicologist, Environmental Defense

Richard Denison, Ph.D.
Senior Scientist, Environmental Defense